

# SS22 THRU SS210

## Features

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- Reverse Energy Tested
- High Current Capability
- Extremely Low Thermal Resistance

## Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|----------------------------------------|---------------------|-----------------------------|
| SS22               | SS22           | 20V                                    | 14V                 | 20V                         |
| SS23               | SS23           | 30V                                    | 21V                 | 30V                         |
| SS24               | SS24           | 40V                                    | 28V                 | 40V                         |
| SS25               | SS25           | 50V                                    | 35V                 | 50V                         |
| SS26               | SS26           | 60V                                    | 42V                 | 60V                         |
| SS28               | SS28           | 80V                                    | 56V                 | 80V                         |
| SS210              | SS210          | 100V                                   | 70V                 | 100V                        |

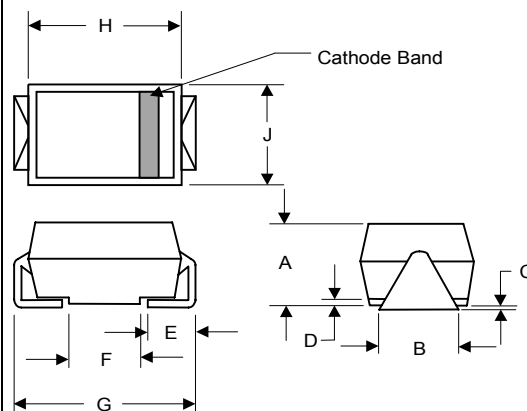
## Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                                               |             |                      |                                                       |
|-------------------------------------------------------------------------------|-------------|----------------------|-------------------------------------------------------|
| Average Forward Current                                                       | $I_{F(AV)}$ | 2.0A                 | $T_J = 100^\circ\text{C}$                             |
| Peak Forward Surge Current                                                    | $I_{FSM}$   | 50A                  | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage<br>SS22-SS24<br>SS25-SS26<br>SS28-SS210 | $V_F$       | .55V<br>.70V<br>.85V | $I_{FM} = 2.0\text{A};$<br>$T_J = 25^\circ\text{C}^*$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage                       | $I_R$       | 0.5mA                | $T_J = 25^\circ\text{C}$                              |
| Typical Junction Capacitance<br>SS22<br>SS23-SS210                            | $C_J$       | 230pF<br>50pF        | Measured at<br>1.0MHz, $V_R=4.0\text{V}$              |

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

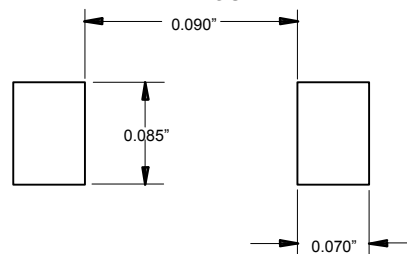
## 2 Amp Schottky Rectifier 20 to 100 Volts

### DO-214AC (SMA)



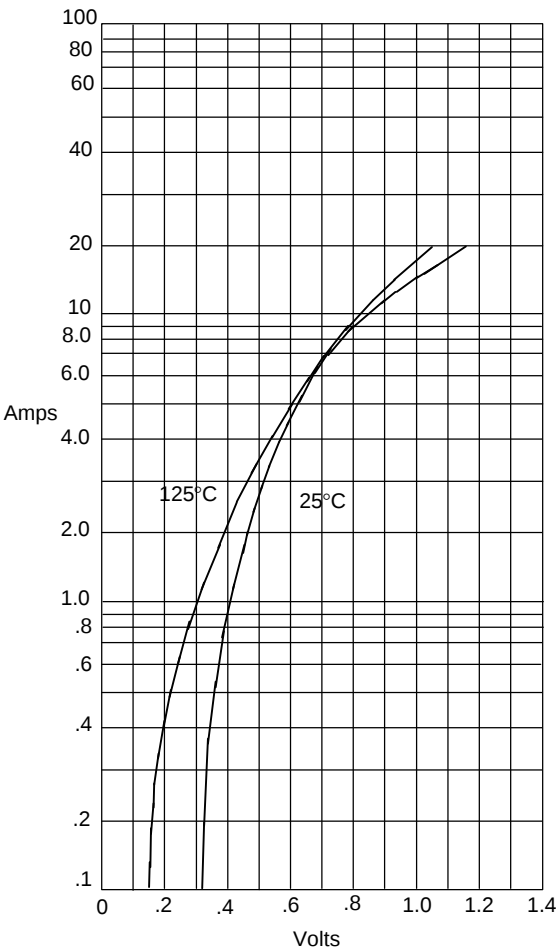
| DIM | INCHES |      | MM   |      | NOTE |
|-----|--------|------|------|------|------|
|     | MIN    | MAX  | MIN  | MAX  |      |
| A   | .078   | .116 | 1.98 | 2.95 |      |
| B   | .067   | .089 | 1.70 | 2.25 |      |
| C   | .002   | .008 | .05  | .20  |      |
| D   | ---    | .02  | ---  | .51  |      |
| E   | .035   | .055 | .89  | 1.40 |      |
| F   | .065   | .096 | 1.65 | 2.45 |      |
| G   | .205   | .224 | 5.21 | 5.69 |      |
| H   | .160   | .180 | 4.06 | 4.57 |      |
| J   | .100   | .112 | 2.57 | 2.84 |      |

### SUGGESTED SOLDER PAD LAYOUT



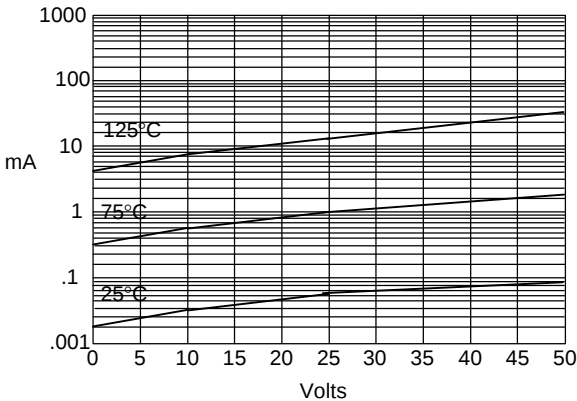
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Figure 1  
Typical Forward Characteristics



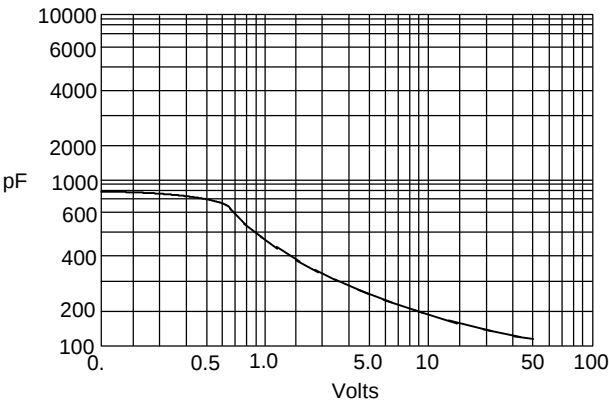
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



Typical Reverse Current - mA *versus*  
Reverse Voltage - Volts

Figure 3  
Typical Junction Capacitance



Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

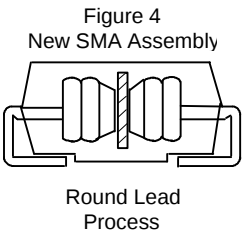


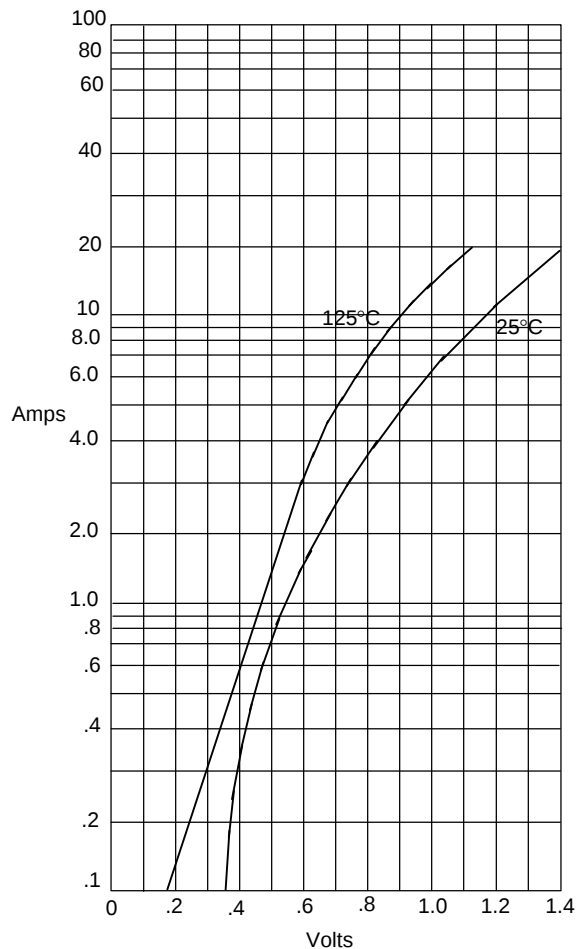
Figure 4

New SMA Assembly

Round Lead  
Process

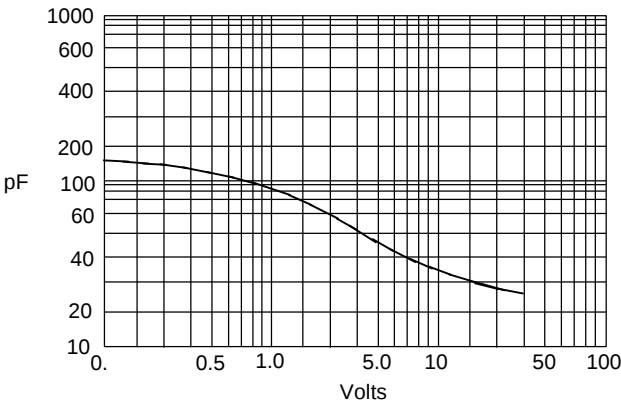
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Figure 1  
Typical Forward Characteristics



Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 3  
Typical Junction Capacitance



Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

Figure 4  
New SMA Assembly

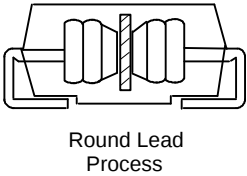
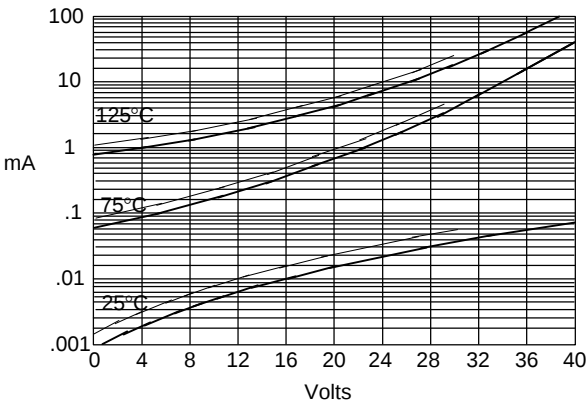


Figure 2  
Typical Reverse Characteristics



Typical Reverse Current - mA *versus*  
Reverse Voltage - Volts

SS23  
SS24